READ ME FIRST
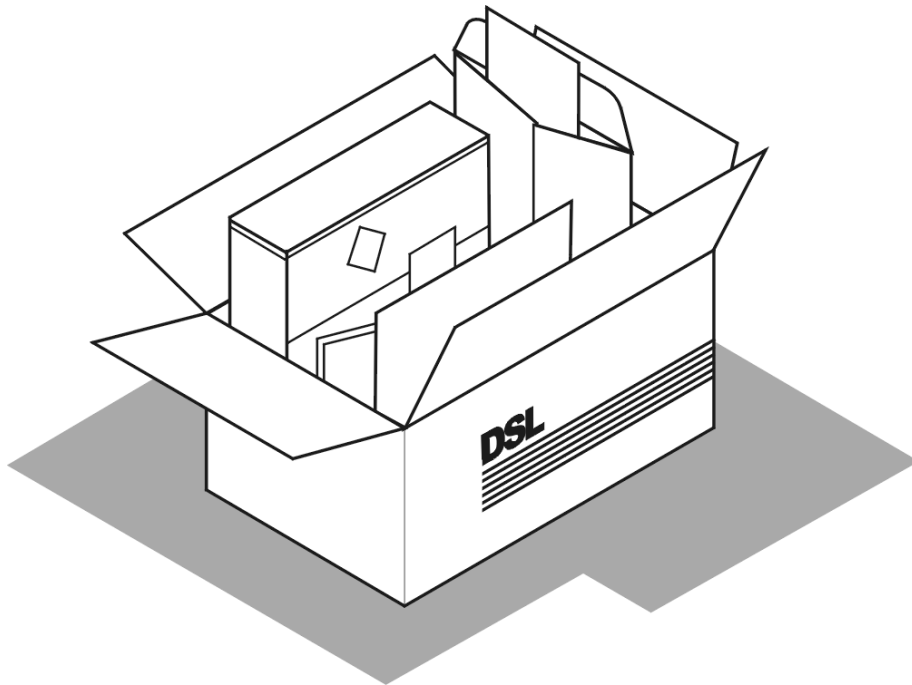# Windows® 95/98/Me/2000

®

SBC

*DSL Equipment Installation Guide:
Efficient Networks® 5260

*Digital Subscriber Line

Table of Contents

Follow Steps 1 through 8 to complete the DSL Equipment Installation

For Support:

- Review the **troubleshooting** in this guide on **page 23**
- Call your Internet Service Provider 'help desk' for further information on Internet Service Provider connection, and registration.

IMPORTANT NOTE: This guide portrays the typical flow for the installation process. Please follow the instructions, including running the SBC Express software BEFORE installing any NIC cards or modems. Some computer or network configurations may cause software windows to appear that are not depicted in this guide. Please read and follow the instructions on those screens to continue the installation process.

Verify that you are installing your DSL equipment AFTER the "Service Completion Date" given to you when you ordered your DSL Internet Service.

SBC Advanced Solutions, Inc. and affiliates have no responsibility for any personal injury or property damage which may result from your installation of DSL Equipment as discussed in this Guide. SBC Advanced Solutions, Inc. and its affiliates specifically disclaim any liability for such injury or damage. By proceeding with this installation, you assume all risk of personal injury or property damage. Please consult the documentation provided by your PC vendor to identify any impacts to your warranty. SBC, SBC EXPRESS and the SBC Logo are registered trademarks of SBC Communications, Inc.

Step 1: Verify Your System Requirements and Documents

This Installation Guide is for <u>Windows® 95/98/Me/2000</u> users only.

<u>**The SBC Express software will ensure that you meet the following minimum requirements. You will not be able to complete the installation without meeting these requirements.**</u>

- **PC** with a Pentium-class processor, CD-ROM Drive, 133 MHz, 25 Mb free disk space, 32 Mb RAM and any one of the following:
    a) An available PCI slot (for desktop installations)*****
    b) An available PCMCIA slot (for laptop installations)
   c) A built-in Ethernet port (consult your system's documentation for details)

<u>**Please note: many PC systems already have a Network Interface Card installed. The SBC Express software will detect if you have a Network Interface Card installed. If your system already has a card installed, you DO NOT need to install an additional one. If you have any questions, please consult the information that came with your PC system*</u>.

<u>**Other items you may need during the installation process:**</u>

- Your system manufacturer Owner**'**s Manual.
- Documentation and/or software from your Internet Service Provider.

<u>**Call your Internet Service Provider if you have questions regarding System Requirements or System Documentation.**</u>

Step 2: Verify the Contents of Your DSL Equipment Kit
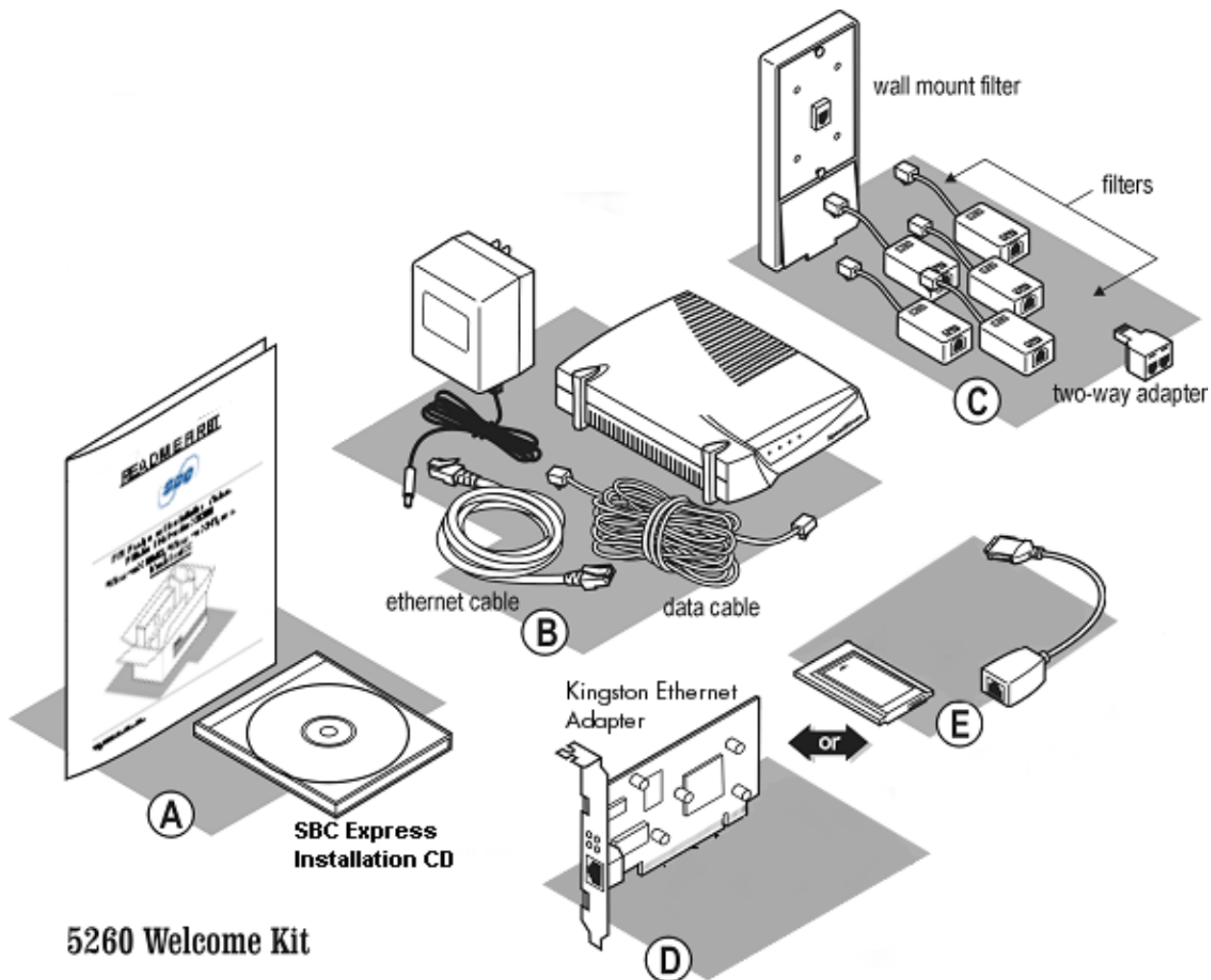
Your DSL Equipment Kit Contains:

A: This Installation Guide and the SBC Express CD.

B: 1 Efficient Networks® 5260 DSL Modem with Ethernet cable (connects to Adapter, below) and power cable.

C: 1 Filter Pack containing: 5 in-line filters, 1 wall-mount filter, 1 two-way adapter, and 1 data cable.

D: 1 Kingston® Ethernet Adapter for Desktop PC
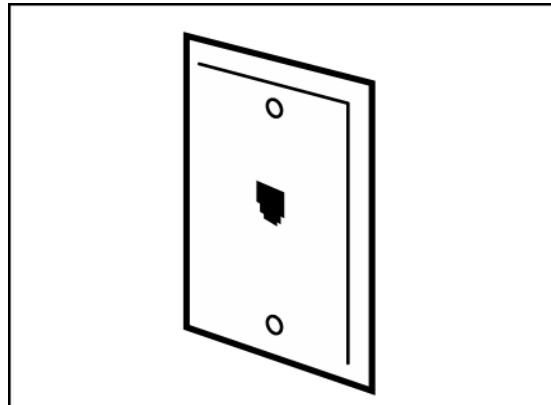
   --OR--

E: 1 Kingston® Ethernet Adapter for Laptop PC

Note: Internet Software and/or instructions may be provided separately by your Internet Service Provider.
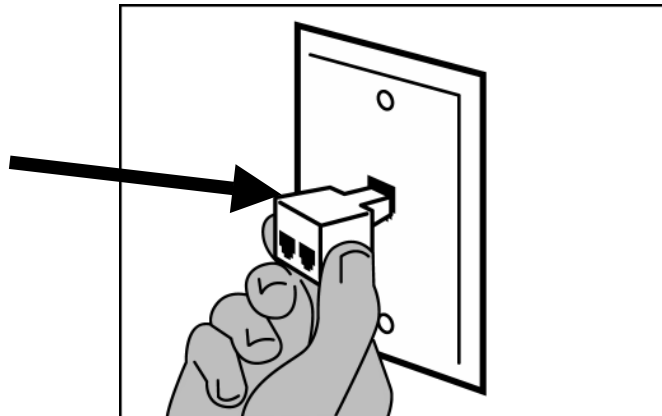
Step 3: **Install a Telephone Filter on Every Telephone Line**

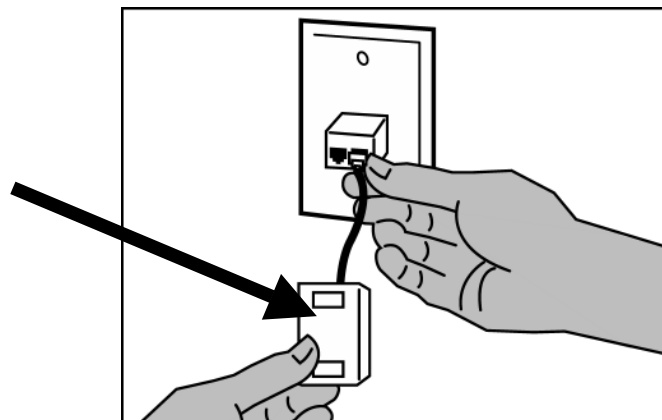3-1   Set up the phone jack where your DSL modem will go.

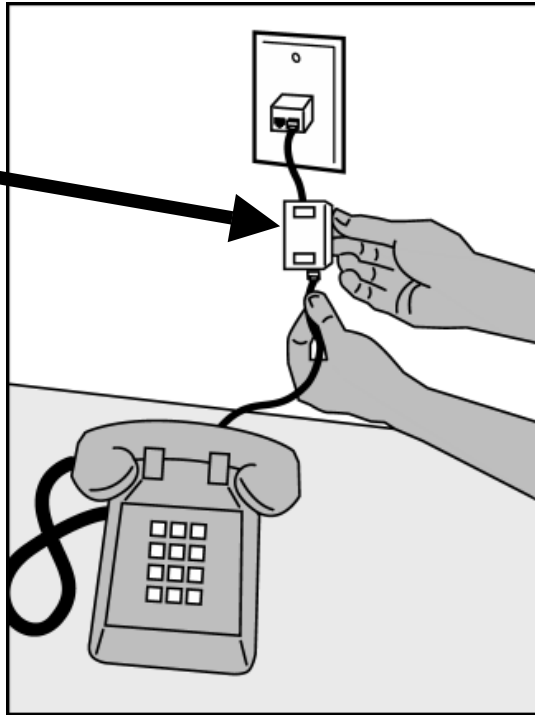**1) Locate the phone jack where you want to connect your DSL**

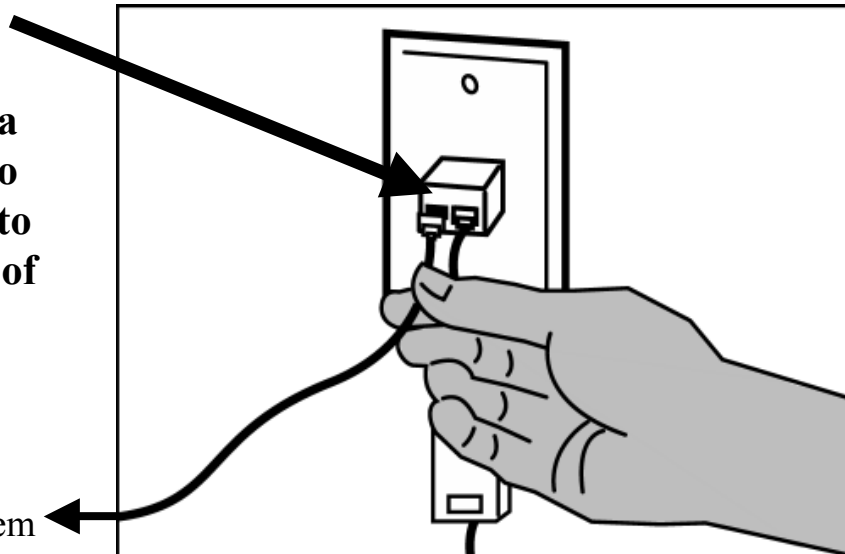**2) Insert the 2-way adapter in the phone jack**

3) Connect a filter to one side of the 2-way adapter

**4) If you have a
phone, fax machine,
analog modem or
other phone device at
this location, connect
it to the filter**

**5) Connect the data
cable that will go to
your DSL modem to
the <u>unfiltered</u> side of
the 2-way adapter**

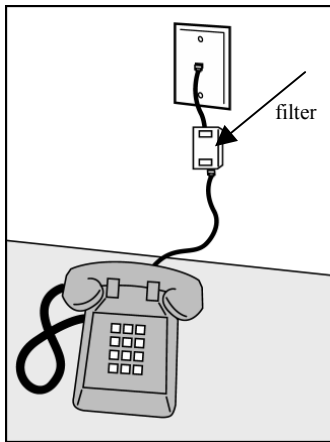To the DSL modem
to be installed in
step 6.

3-2   Install a filter on all other phones and phone devices.

Why do I need a filter on all my other phones and phone devices?

Converting your regular phone line into a high-speed Digital Subscriber Line (DSL) can cause audible noise (high pitched tones and static) when you talk on the phone. You need to install a filter on every telephone or device that shares the same phone number as your DSL line to eliminate this noise.

Other phones

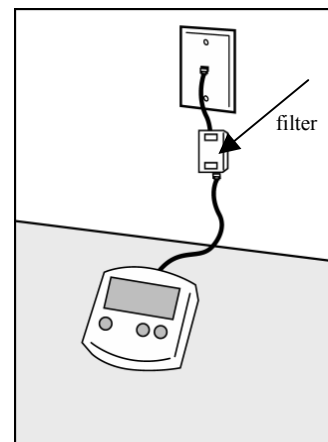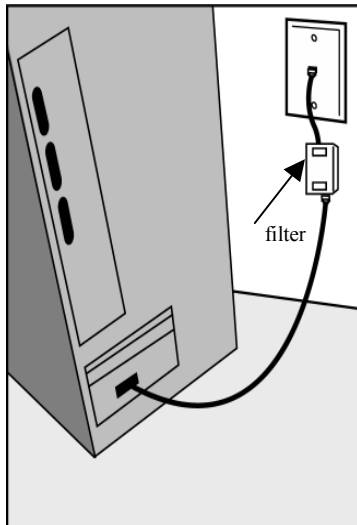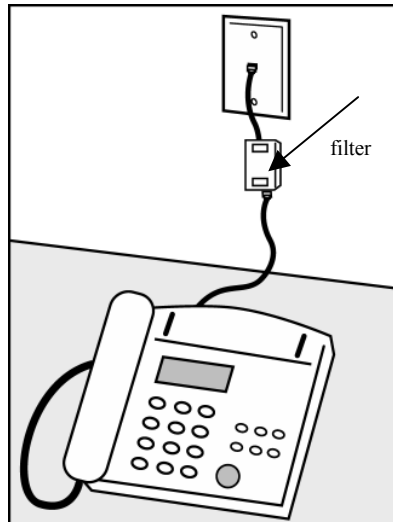## Answering machines
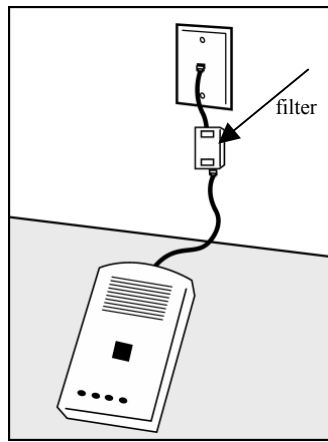
Caller ID boxes

Analog computer modems

Fax machines

Wall mount phones
Use the wall mount filter shown
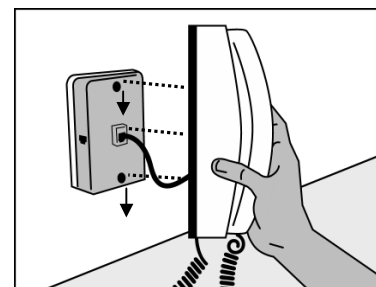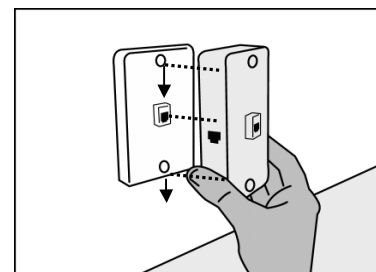
Remember! <u>Don't</u> install a filter on the data cable that you are connecting to your <u>DSL modem</u>.

3-3   Other filters you may encounter in your DSL Equipment Kit.

Thumbscrews
in unlocked
position.

Thumbscrews
in locked
position.

Tabs in
unlocked
position.

Tabs
in locked
position.

③

①

②

1. Align plug on filter with wall jack
2. Slide filter down until seated securely
3. Press bottom door shut to lock

Note: If bottom door does not close, push
filter down firmly until seated.
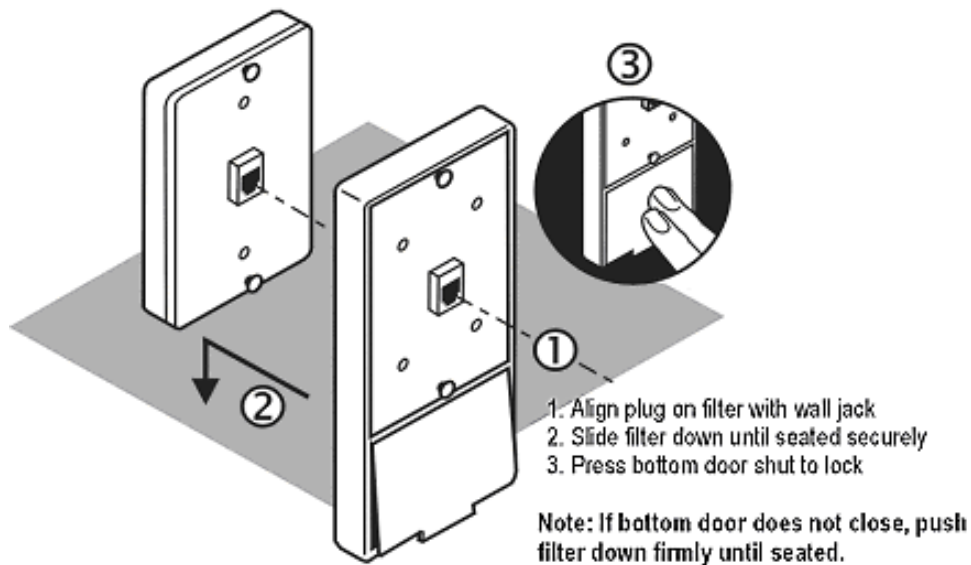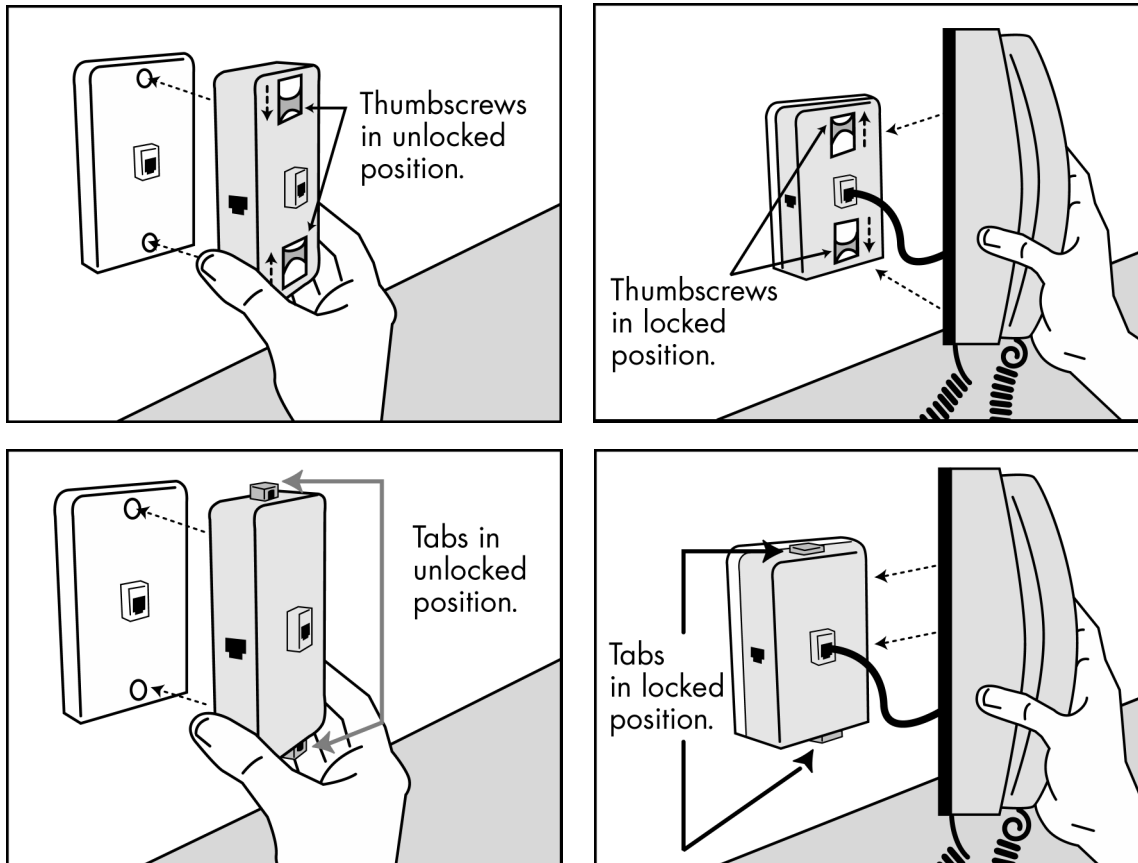
Step 4: Choose Your Modem and Minimum Requirements Check

4-1   Insert the SBC Express CD into your CD-ROM drive. SBC Express should start automatically. If not, select **Run** from the Windows Start menu. Type "D:\Launch.exe". (Substitute the appropriate letter of your CD-ROM drive for "D".)

4-2   Select Efficient Networks 5260 and click **Next**.
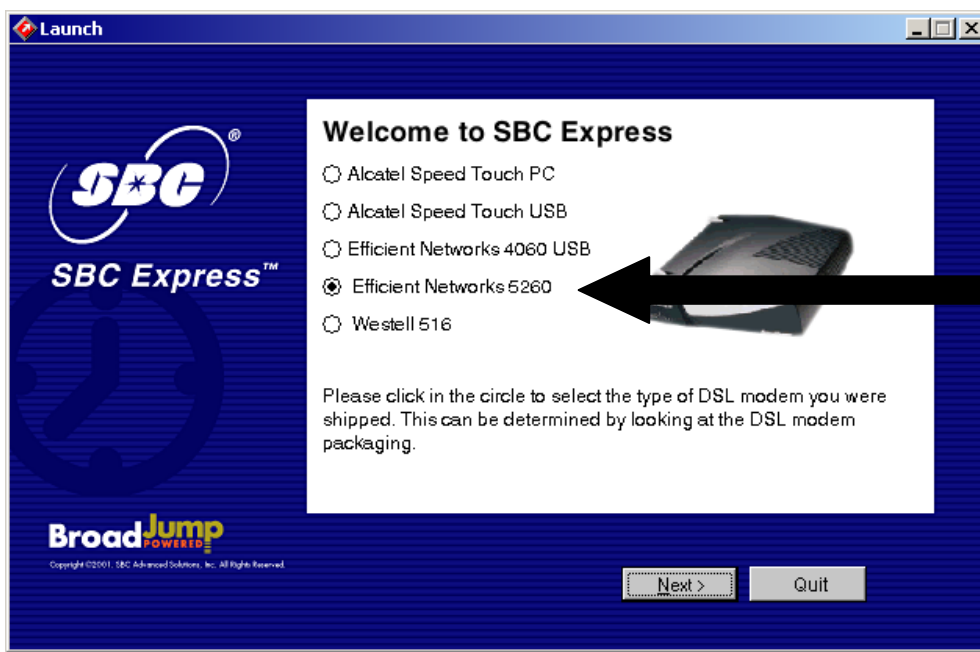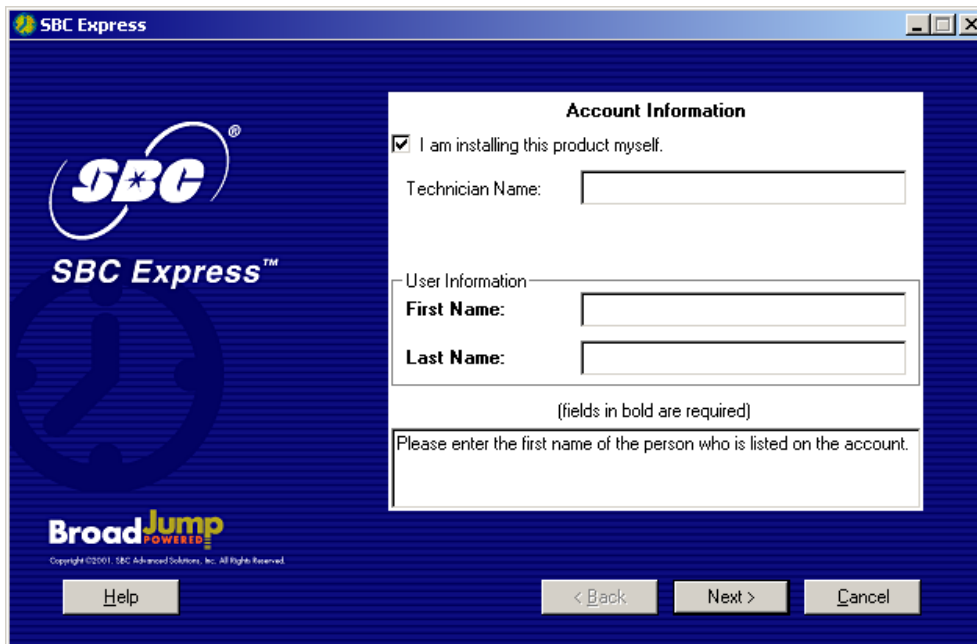
4-3   SBC Express displays the Welcome screen. Click **Next** to proceed.
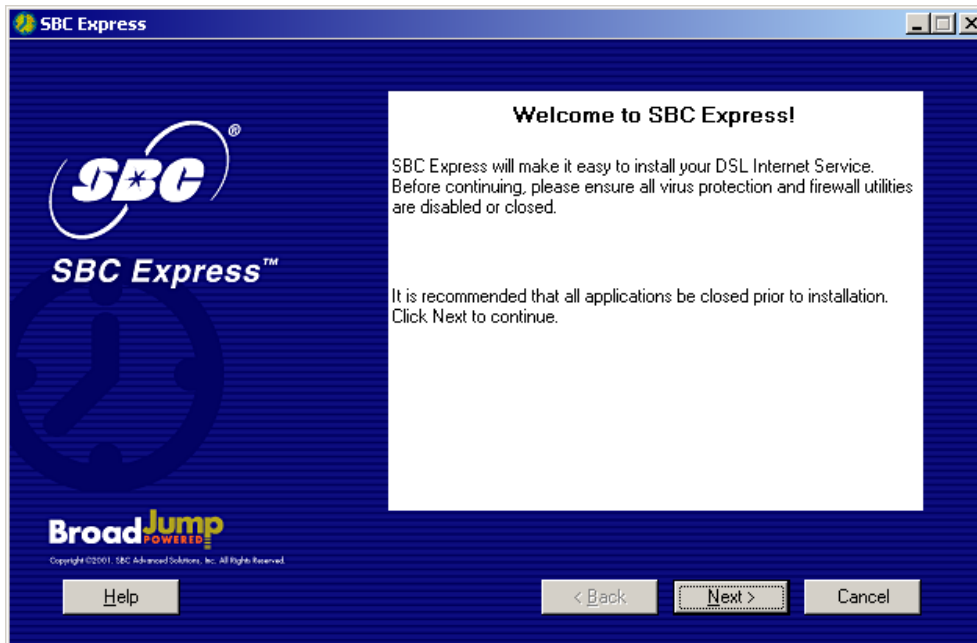
4-4   SBC Express displays the license agreement. If you agree to the terms, click **Accept**. If you do not accept, installation cannot continue.
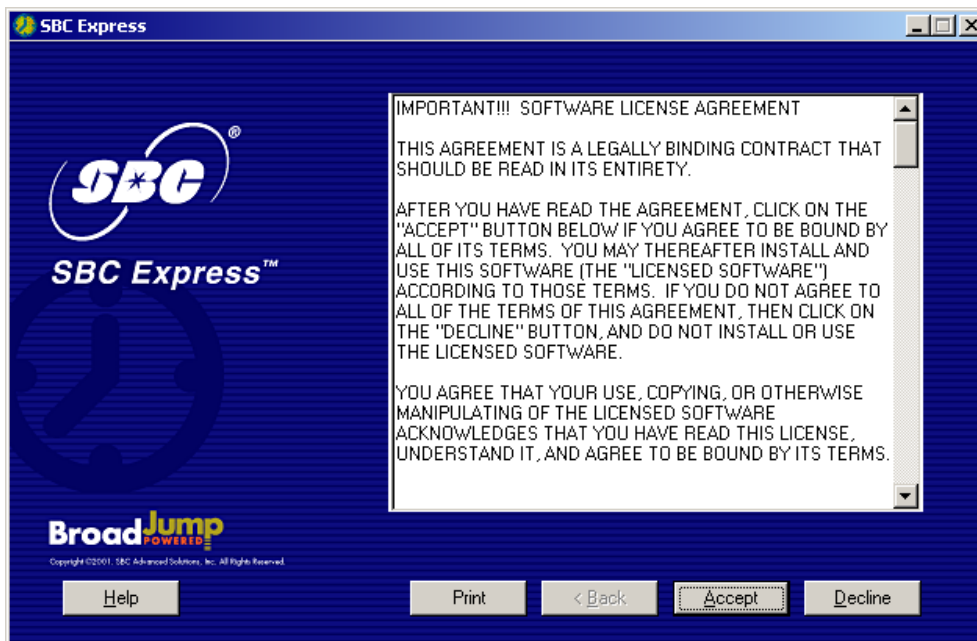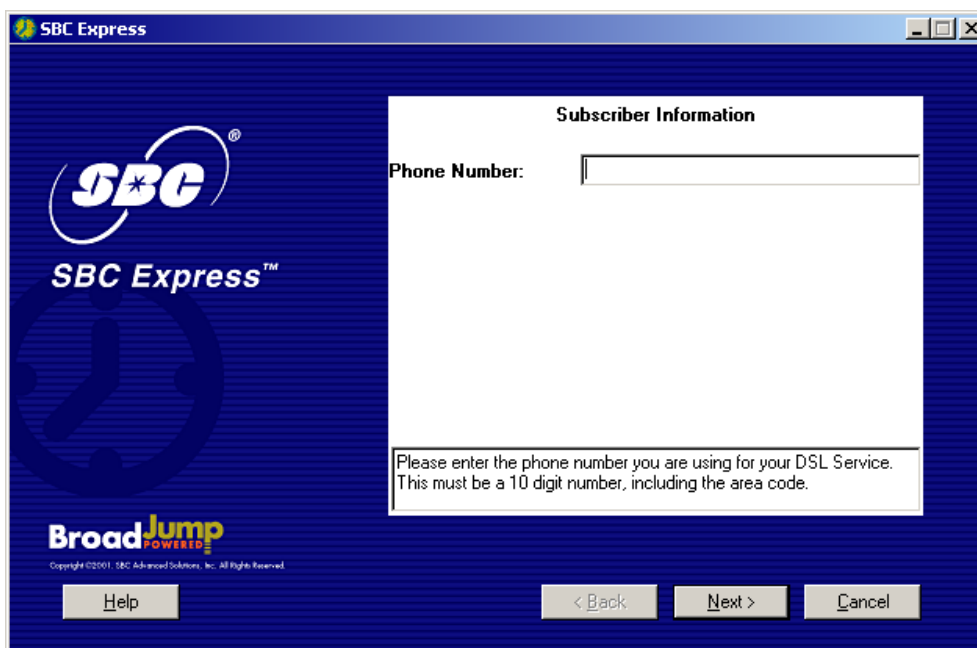
4-5   SBC Express now prompts you for your first and last name. Please type your first and last name and then click **Next** to proceed. Do not enter Technician Name.

4-6   Enter your 10-digit DSL phone number in the next screen. Click **Next** to proceed.

4-7 SBC Express quickly checks your computer system to ensure that it meets the minimum requirements for DSL service.
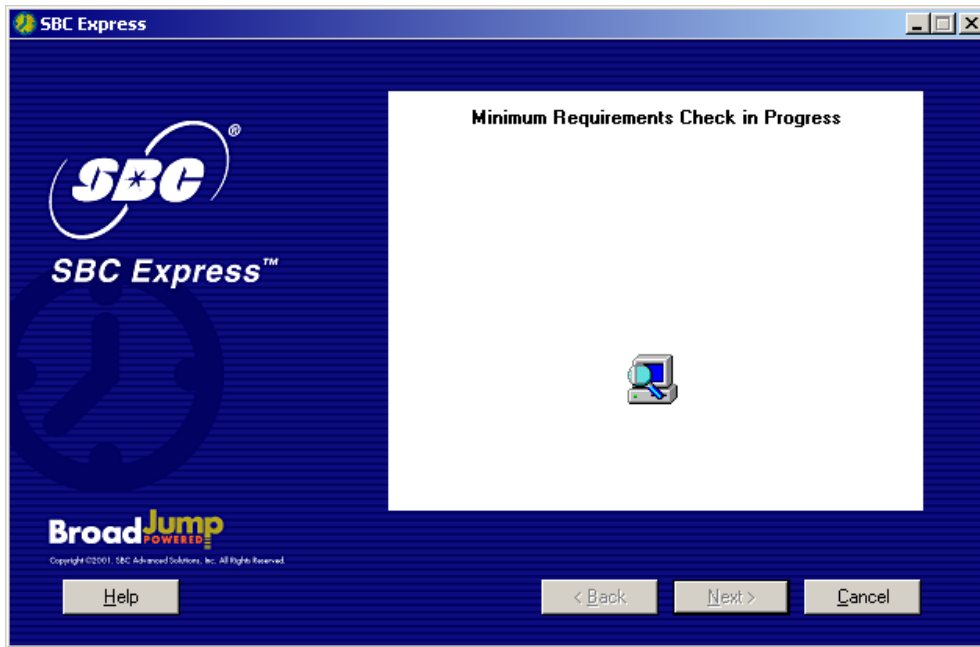
If your computer meets the minimum requirements, SBC Express automatically proceeds to the next step. You should continue to Step 6 on page 17.

If you shutdown your computer**, leave the CD in the the CD-ROM drive**, and SBC Express will continue after you restart.

If your computer does not meet the minimum requirements, SBC Express displays a message with details of the problem. Your computer must meet the minimum requirements before you proceed.

If your computer fails the minimum requirements check because it does not have a Ethernet Adapter installed (see screen below), please go to Step 5 on page 13.
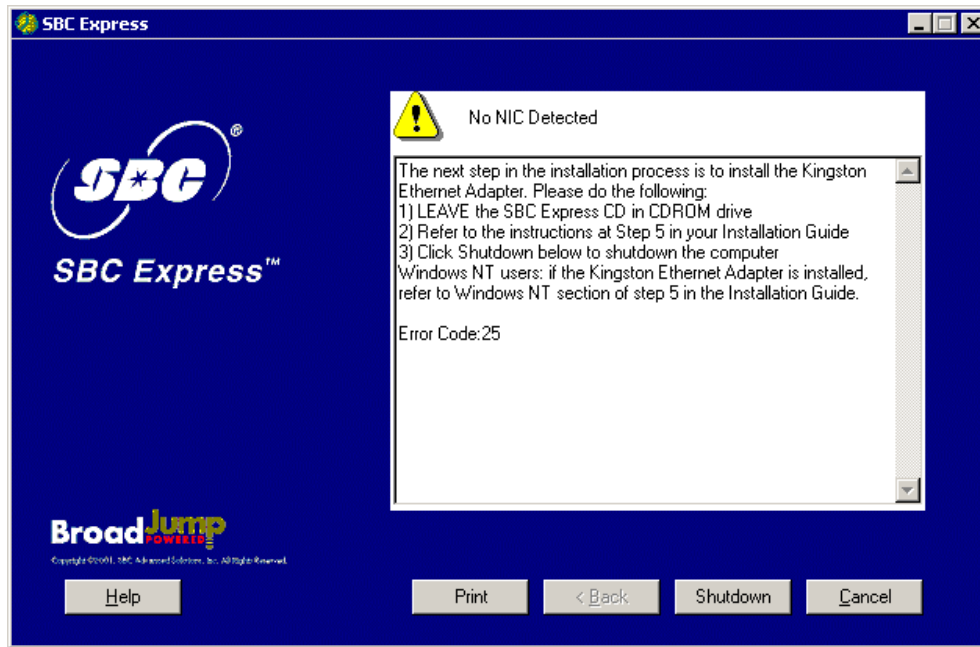
If your network card is incorrectly installed, SBC Express will help you fix it. See *Troubleshooting SBC Express* on page 26 for help troubleshooting network card and minimum requirement problems.

If you shutdown your computer, leave the CD in the the CD-ROM drive, and SBC Express will continue after you restart.

Step 5: Installing the Kingston® Hardware

IMPORTANT NOTE: **If your computer already has an Ethernet card installed and you passed the minimum requirements step in the SBC Express Software, it is not necessary to install the Kingston® Ethernet Adapter provided in this equipment package. You may proceed directly to Step 6 on page 17.** If not, you will need to install the Ethernet Adapter provided, and this requires that you open your PC. Please consult the documentation provided by your PC vendor to identify any impacts to your warranty.

If you shutdown your computer**, leave the CD in the the CDROM drive**, and SBC Express will continue after you restart.

Installing the Kingston® Ethernet Adapter

You should be at the following screen in the SBC Express Software:
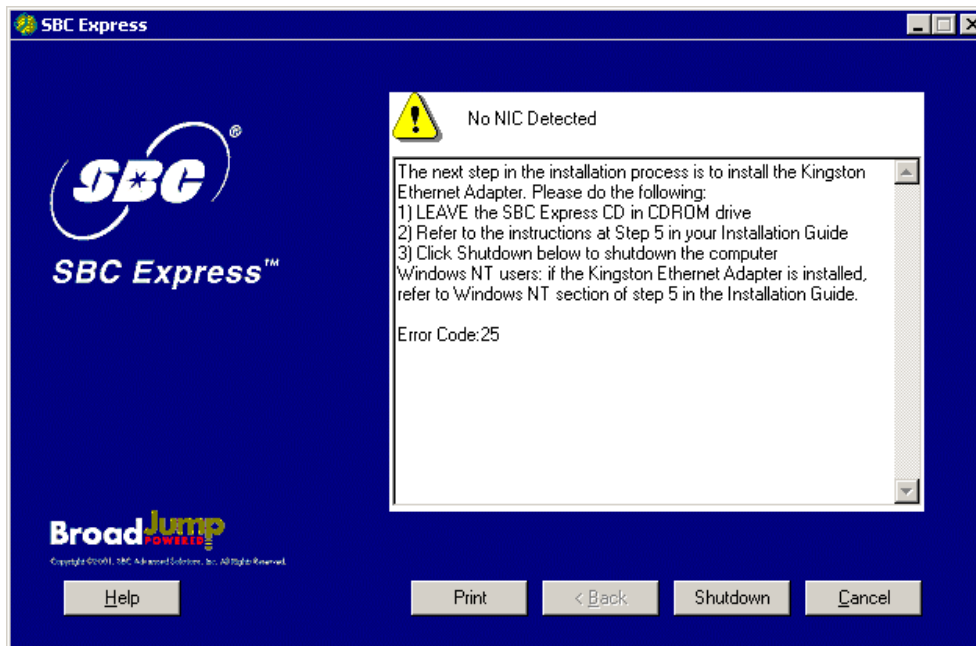
- **Follow steps 5-1 through 5-10 below for <u>Desktop</u> PC installations.**
- **For <u>Laptops</u>, skip to step 5-11.**

DESKTOP Systems

5-1   **<u>Click Shutdown in SBC Express and then turn off all peripheral devices.
        Remember to leave the SBC Express CD in the CD-ROM drive.</u>**

5-2   Unplug the power cord for your computer from the electrical outlet.

5-3   Open the case of your computer (review your computer manufacturer's Owner's Manual
        for specific instructions).

5-4   Touch the computer chassis (metal frame) before touching the Kingston® Ethernet
        Adapter. This helps to protect the Kingston® Adapter from static electricity.

5-5   Locate an available PCI slot (usually white in color). You may use any available PCI
        slot. Make sure you are looking downwards on the PCI slot. You may need to turn the
        computer on its side to accomplish this *(review your computer manufacturer's Owner's
        Manual for specific instructions)*.

5-6   Remove the metal PCI slot cover from the unused PCI slot, and retain the screw.

PCI Slot

Remove PCI slot cover
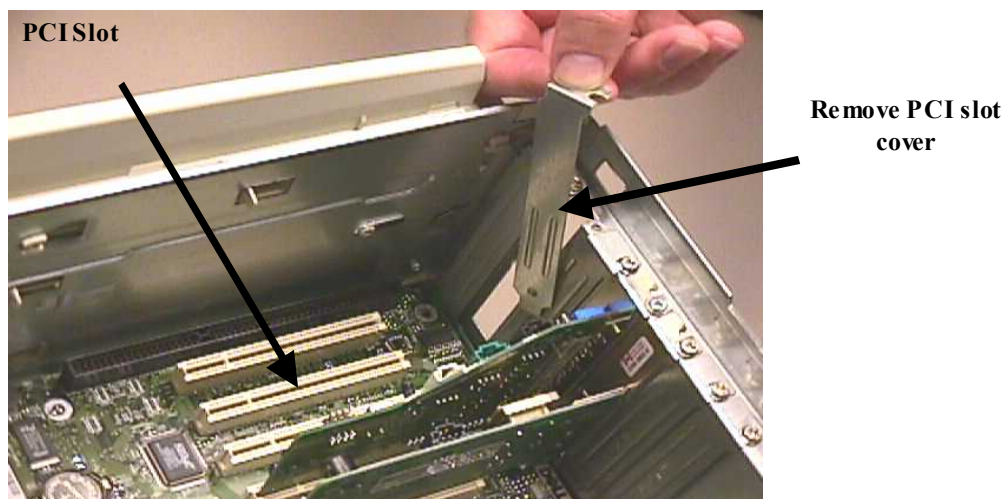
5-7   Carefully insert the Kingston® Ethernet Adapter into any empty PCI slot. Make sure the card is completely seated by pressing firmly.

5-8   Verify that the end bracket is flush against the chassis. Make sure the gold connectors along the base of the Kingston® Ethernet Adapter are completely and evenly inserted into the PCI slot.

wrong   right

5-9   Fasten the card into the computer chassis with the screw you set aside earlier.

5-10   Replace the computer cover. Plug the power cord back into the electrical outlet and turn on your PC, making sure the SBC Express CD is in the CD-ROM drive. Proceed to step 5-15.

LAPTOP Systems- Installing the Kingston® Ethernet Adapter

5-11 **Click Shutdown in SBC Express and then turn off all peripheral devices.
      Remember to leave the SBC Express CD in the CD-ROM drive.**

5-12 Insert the Kingston® PC Card into your computer's PCMCIA Type II or Type III slot.

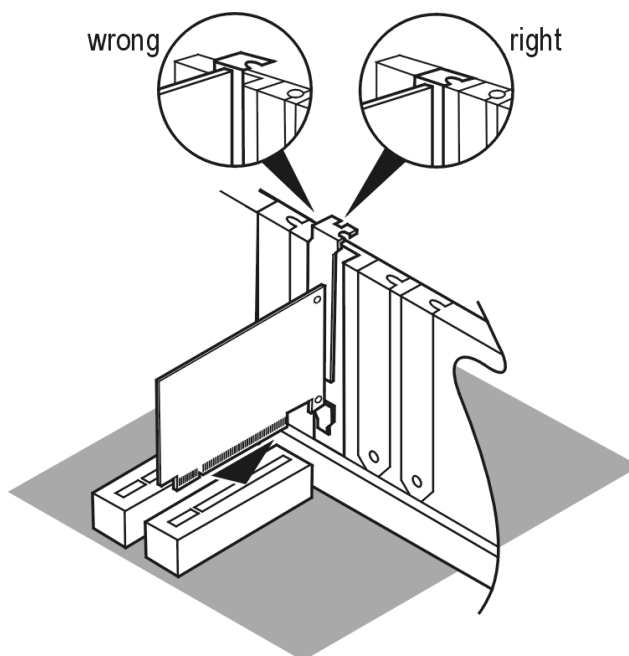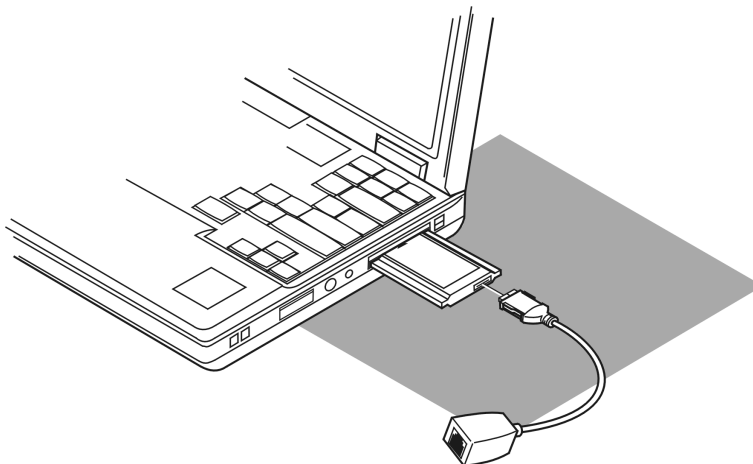5-13 Carefully push the Media Access Module (MAM) into the socket on the PC Card until
      the locking tabs click into place.

5-14 Power up your laptop and make sure the SBC Express CD is still in the CD-ROM drive.

All Systems- Installing the Kingston® Software

5-15 Windows automatically installs the software needed to support the Kingston Ethernet
      Adapter from the SBC Express CD. This software installation may take several minutes.

      Windows 2000 users will be prompted with the following screen. Click **Yes**.
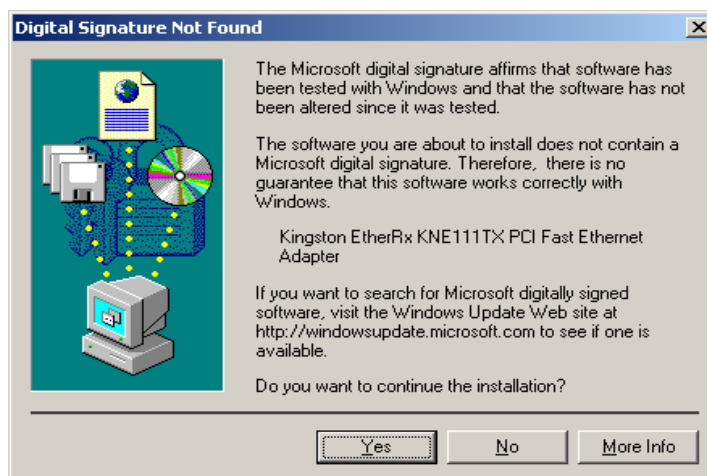
**After the software is installed, you may be prompted to reboot your computer. Be
sure to leave the SBC Express CD in the CD-ROM.**

Step 6: Install the Efficient Networks® DSL Modem

Your computer should be turned on. Your modem should be turned OFF.

You should be at the following screen in the SBC Express Software. Only click **Next** <u>AFTER</u> modem is setup.
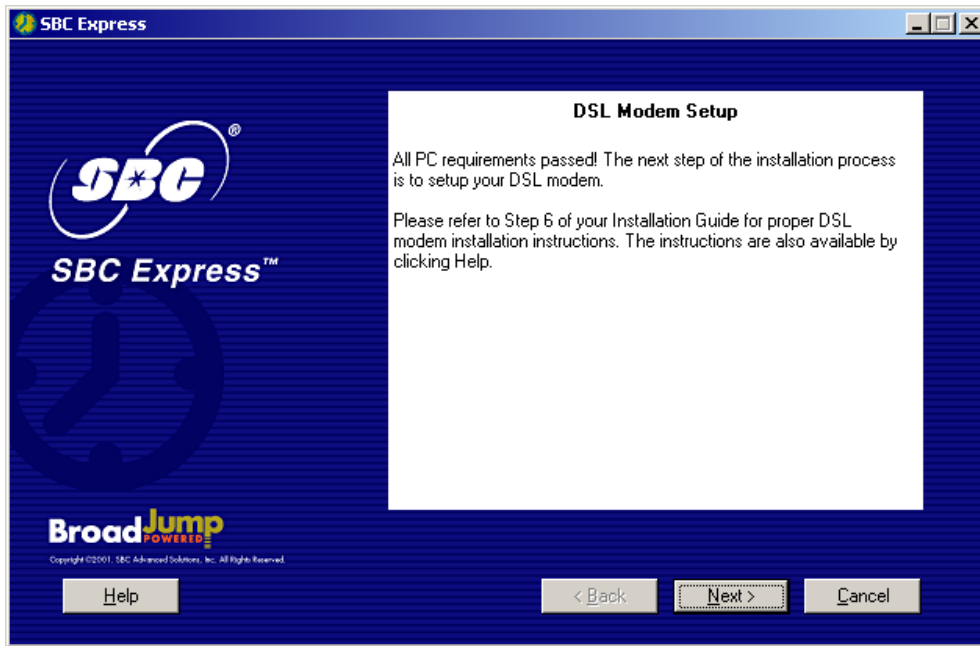
6-1   Consult the following diagram.

**DSL Modem Setup
with Two-Way Adapter**

No filter on data cable.

power

On/Off

data cable
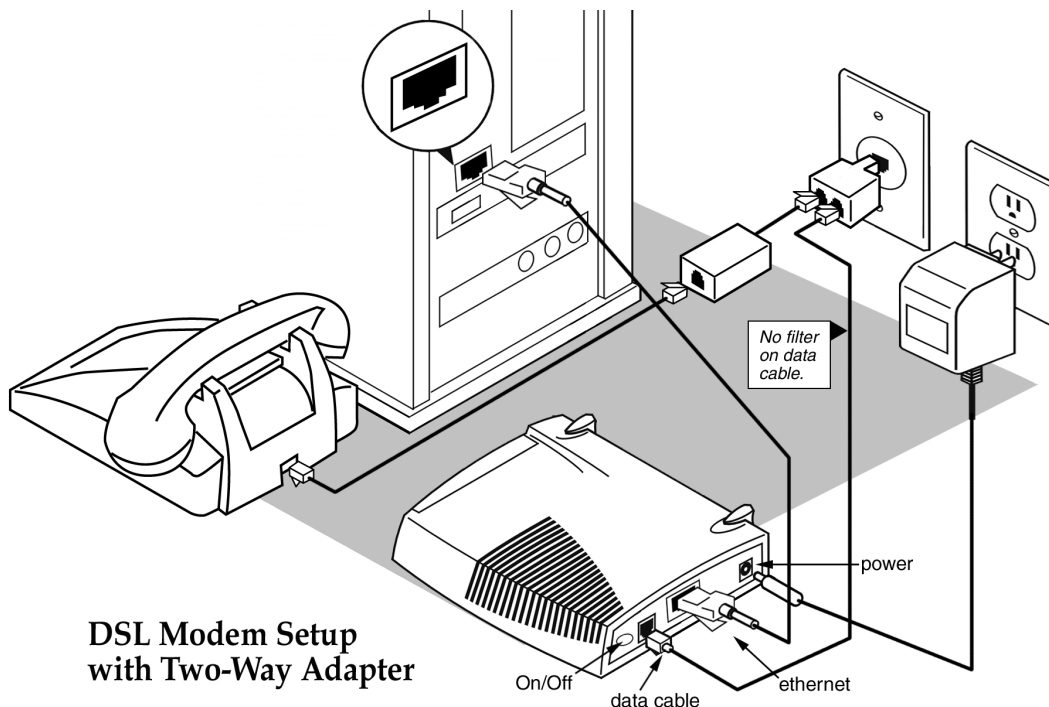
ethernet

6-2   Plug the power cable into the DSL modem and an electrical outlet.

6-3   Connect the data cable to your telephone jack and your DSL modem. There should NOT be a filter between the data cable and the wall jack.

6-4   Connect the Ethernet cable to the Kingston® Ethernet Port or the built –in Ethernet Port on the back of your PC and to the Ethernet Port on the back of your DSL modem.

6-5   Turn the DSL Modem power switch **ON**.

6-6   The **Sys, ATM, Enet** and **DSL** lights should all turn solid green within two minutes.

- If the **Sys** or **ATM** light does not turn solid green, check your power cable. Are you connected to a live electrical outlet? Are connections secured? Is the modem turned on?

- If the **Enet** light does not turn solid green, check your Ethernet connections. Are they secure? Is the PC turned on?

- If the **DSL** light does not turn solid green:
  - Verify that there is <u>NO in-line filter</u> on the data cable from your DSL modem to the telephone jack.
  - Try another telephone jack in your home.
  - Turn off the modem, reboot the computer and then turn the modem back on.
  - Verify that you are installing your DSL equipment AFTER the "Service Completion Date" given to you when you ordered your DSL Internet Service.

6-7   Proceed to Step 7 by clicking **Next** on the DSL Modem Setup screen.

Step 7: Finish Configuring Your System

7-1   SBC Express will install additional software necessary for your service. Leave the SBC Express CD in the CD-ROM drive. You will see the following screen during the software installation. Your machine may reboot during this process.

Installing EnterNet 300

Installing Efficient Networks EnterNet 300.
Please wait...

7-2   You have finished software installation for DSL. Click Finished in SBC Express window and then proceed to Step 8 to configure the connection to your Internet Service Provider.

SBC Express

SBC Express™

Go to Step 8

Software installation is complete.

Click "Finished" and go to Step 8 in your Installation Guide to configure your software to connect to your Internet Service Provider.

Broad Jump POWERED
Copyright ©2001, SBC Advanced Solutions, Inc. All Rights Reserved.

Help   Details   Next >   Finished
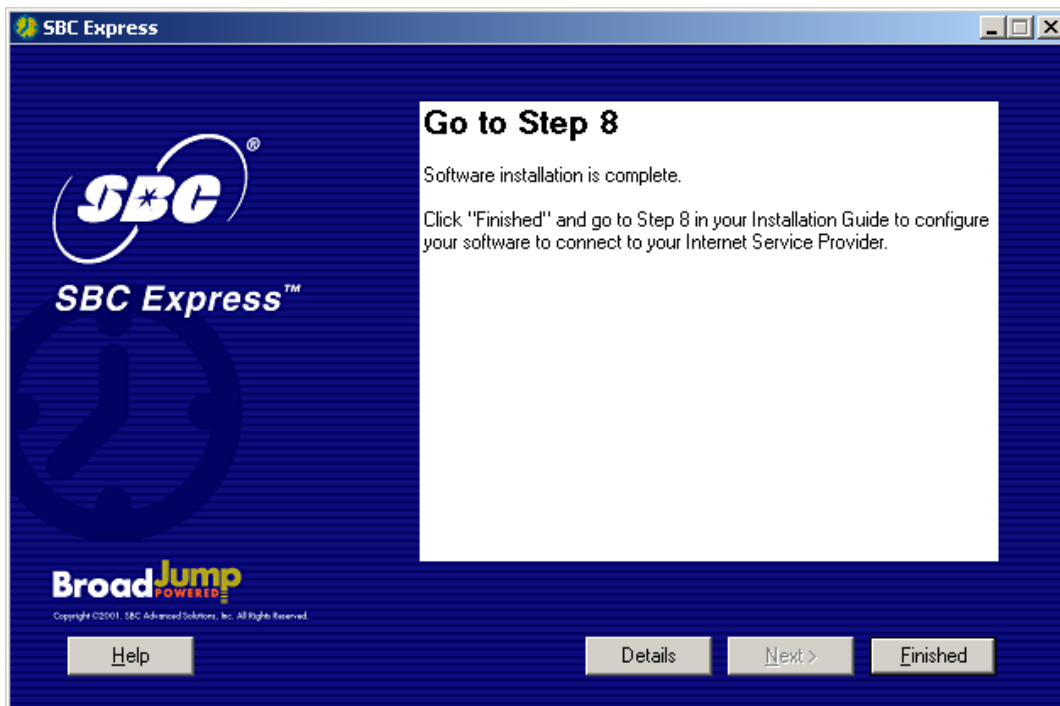
Step 8: Create a Connection Profile

8-1 **Setup a New Profile in EnterNet 300**.

- Double-click on the desktop **EnterNet 300** icon.
- In **Profiles**, double-click on the **Create New Profile** icon.
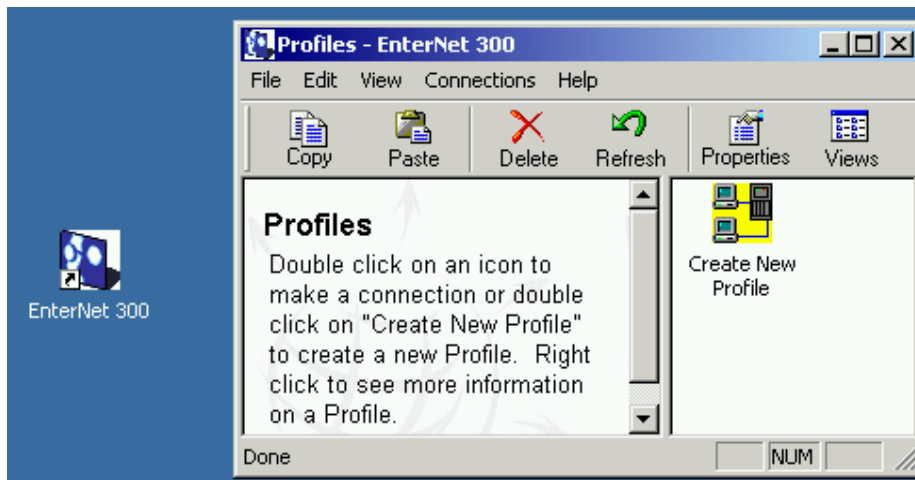
8-2 You will be prompted to supply a name for the connection. Enter the Profile Name as **DSL Connection**. Click **Next**.

8-3 Locate your ISP provided **User ID** and **Password**. Set up the DSL Connection profile by typing the **User ID** and **Password** in the User Name and Password fields. Click **Next.**

8-4 Leave the **Server** and **Service** fields BLANK. Click **Next.**

8-5 Click **Finish** to save the configuration.

8-6 Double-click the new **DSL Connection** icon in the Profiles Dialog box.
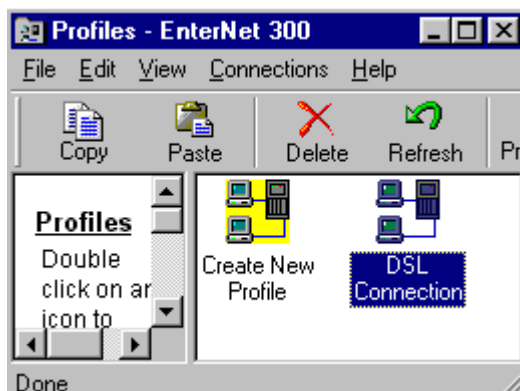
8-7   A Connection dialog will open. Click **Connect**.

8-8   **Double-click** on the EnterNet icon in the system tray (next to the clock, in the lower-right

corner of your screen) and select **Disconnect.**
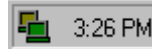
EnterNet Icon

8-9   Double-click the EnterNet 300 folder on your desktop and then double-click **DSL Connection** icon.

8-10   Open your browser again and test your connection by visiting your favorite web sites.

Appendices

APPENDIX A

Having Trouble?

If the suggestions below don't resolve your problem, technical support is available from your Internet Service Provider. Please refer to the Internet Service Provider's information on how to contact them for technical assistance.

I can't open my computer case. What do I do?

- Consult your computer manufacturer's Owner's Manual.
- Call your computer manufacturer's Support Line.

I can't connect. What do I do?

- Make sure there is no filter on the phone jack/cord connected to your DSL modem
- Check your Ethernet cable connection. Is it secure?
- Verify that you are installing your DSL equipment AFTER the "Service Completion Date" given to you when you ordered your DSL Internet Service.
- Call your Internet Service Provider 'help desk' for further information on Internet Service Provider connection, and registration.

APPENDIX B

I want to uninstall/reinstall the Kingston® Adapter. What do I do?

Uninstalling (and reinstalling) the Kingston® Adapter in Windows® 95/98

1. Select *Start -> Settings -> Control Panel*. Double-click the **System** icon and choose the **Device Manager** tab.

2. Open the **Network Adapters** section (click the Plus sign).

3. If you don't see the device under **Network Adapters,** look for a "**PCI Ethernet Controller**" in **Other Devices.** See picture below.
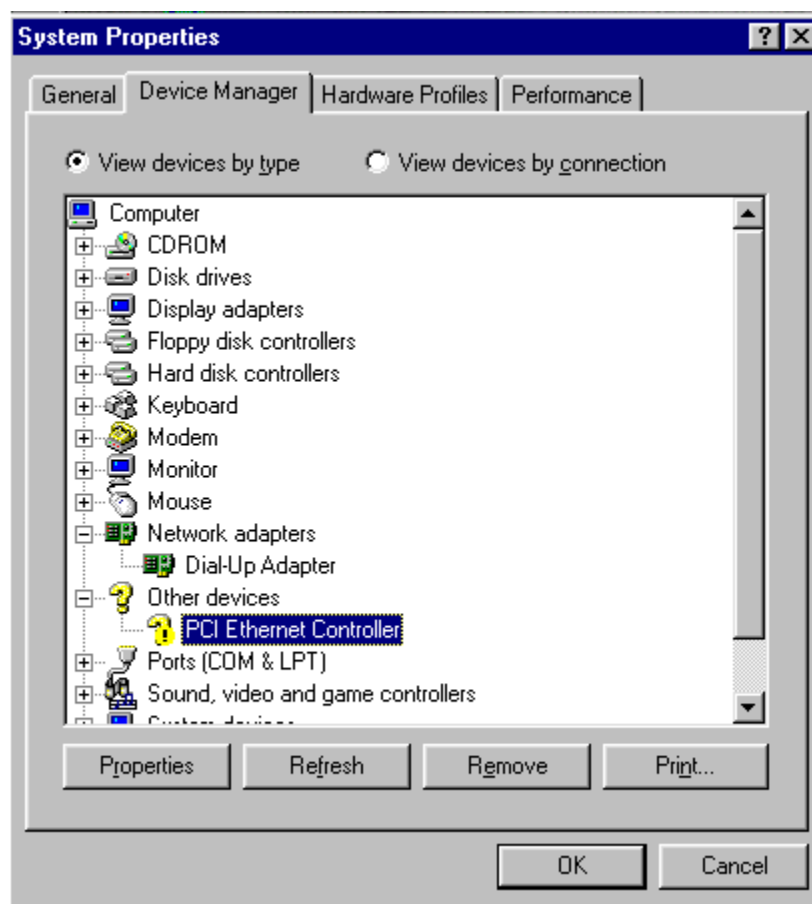
4. Highlight the **PCI Ethernet Controller**, or **Kingston® KNE-PC2** (laptop), or **KNE110,** or **KNE111** (desktop) adapter and click **Remove**.

   - If you don't see Kingston® at all in the Device Manager, the card is probably not seated correctly. Follow the steps below.

5. Shut down the desktop or laptop. Turn OFF and unplug the computer and any peripheral devices.

6. Remove the Kingston® Adapter Card.

   DESKTOP For the Internal Kingston® Ethernet Adapter Card

   - Open the computer case using your computer manufacturer's instructions and then remove the screw holding card in place.

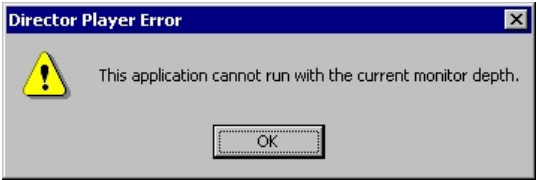   - Carefully remove the Kingston® Adapter card from the PCI slot.

   LAPTOP For the PC Card

   - Press the release button (consult your computer manufacturer's Owner's Manual if you don't know where this button is located).

   - Slide the PC Card completely out of the slot.

7. Reinstall the card following procedures in Step 5. Desktop users should try a different PCI slot, if possible.

APPENDIX C

Troubleshooting SBC Express

Please refer to this list if you are having problems using SBC Express or if you receive an error message. If after troubleshooting, you are still having problems, then you should contact the numbers listed in Appendix A.

Step	Problem	Solution
Launch	The following dialog appears: **Director Player Error** ☒ ⚠ This application cannot run with the current monitor depth. [OK]	Reset your display to 256 colors or more. SBC Express will not run in 16 color mode. From the start menu, choose "settings->control panel". Double-click "Display" and choose the "settings" tab. Select more colors from the "colors" pull-down list.
Minimum Resources	SBC Express verifies minimum requirements on several resources including hard drive space, RAM, operating system level, and processor speed and family. If any of these resources are under the required value, an error will display describing which resource did not meet the requirement.	Update your computer to the recommended resource level.
Installing Network Interface Card	When installing Network Interface Cards on Windows systems the installation process may ask for the original installation disk.	Some of these files can be found in the SYSTEM directory or the WINDOWS directory of the machine. If not, you will have to provide an installation CD-ROM for the installation of the drivers to be successful.
Incompatible Adapter	This scenario can occur when a machine had a previous NIC or Network Adapter installed, but the physical device is missing or was misconfigured.	Use the "Fix" button to launch the appropriate system control panel along with context sensitive help. The help provided will guide you through the steps to disable or remove the adapter.
Missing Internet Protocol	This scenario can occur if Client for Microsoft Networks is not installed with the TCP/IP protocol or if the NIC is installed without binding TCP/IP to the NIC.	Use the "Fix" button to launch the appropriate control panel and context sensitive help to guide you in binding TCP/IP to the network adapter.
Disabled Network Adapter	This scenario can occur when a NIC is present in the system, yet the adapter has been disabled.	Use the "Fix" button with context sensitive help to guide you through enabling the adapter.
Unknown Network Interface Adapter	This scenario can occur if a NIC is physically present and detected by Plug-n-Play, but no drivers were installed for the NIC. Windows will add this device to the "Other Devices" section in the Device Manager.	Use the "Fix" button to launch the appropriate control panel and context sensitive help to guide you through removing the "Unknown device".

This concludes the DSL Equipment Installation Guide